Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for producing a transgenic cotton plant comprising the steps of:

(a) obtaining cotton petiole explants,

(b) exposing the petiole explants to a culture of *Agrobacterium tumefaciens* that harbors a vector comprising an exogenous gene and a selectable marker, the *Agrobacterium* being capable of effecting the stable transfer of the exogenous gene and selection agent resistance gene to the genome of the cells of the petiole explant,

(c) culturing the petiole explants in medium containing low concentrations of plant hormones to induce callus formation,

(d) selecting a transformed callus that expresses the exogenous gene,

(e) culturing the selected callus in suspension culture to induce formation of embryoids, and

(f) regenerating an embryoid to obtain a transgenic cotton plant.

2. (Previously Amended) The method of claim 1, wherein the petiole explants are pre-cultured for a period of time prior to exposure to the culture of *Agrobacterium tumefaciens*.

3. (Previously Amended) The method of claim 1, wherein the culture media used in steps (b)-(e) have glucose as the sole carbon source.

4. (Previously Amended) The method of claim 3, wherein the glucose is at a concentration of about 10 g/l to about 50 g/l.

5. (Previously Amended) The method of claim 4, wherein the glucose is at a concentration of about 30 g/l.

6. (Previously Amended) The method of claim 1, wherein the culture media used in steps (b) and (d)-(f) do not contain hormones.

7. (Previously Amended) The method of claim 1, wherein embryoid regeneration of step (f) is carried out in a medium having a source of nitrogen selected from the group consisting of asparagine, glutamine or both asparagine and glutamine.

8. (Previously Amended) The method of claim 7, wherein the source of nitrogen is at a concentration of about 700 mg/l to about 5 g/l.

9. (Currently Amended) The method of claim 8, further comprising a medium containing KNO_3 as a ~~the~~ source of nitrogen ~~is~~ at a concentration of about 3.8 g/l.

10. (Previously Amended) The method of claim 7, wherein the source of nitrogen is both asparagine and glutamine, and the asparagine is at a concentration of about 200 mg/l to about 1 g/l and the glutamine is at a concentration of about 500 mg/l to about 2 g/l.

11. (Currently Amended) The method of claim 10, wherein the asparagine is ~~in an amount of~~ at a concentration of about 500 mg/l and the glutamine is at a concentration of about 1 g/l.

12. (Previously Amended) The method of claim 1, wherein the suspension culture of step (e) has a duration of less than about 20 days.

13. (Previously Amended) The method of claim 12, wherein the suspension culture of step (e) has a duration of about 10 days to about 20 days.

14. (Previously Amended) The method of claim 13, wherein the suspension culture of step (e) has a duration of about 14 days.

15. (Canceled)

16. (Currently Amended) The method of claim ~~15~~ 1, wherein the concentration of any one hormone is from 0 to about 1 mg/l.

17. (Currently Amended) The method of claim ~~15~~ 1, wherein step (c) is carried out in the presence of 2,4-dichlorophenoxyacetic acid at a concentration from 0 to about 0.5 mg/l and kinetin concentration from 0 to about 1 mg/l.

18. (Previously Amended) The method of claim 17, wherein the 2,4-dichlorophenoxyacetic acid is at a concentration of about 0.05 mg/l and the kinetin is at a concentration of about 0.1 mg/l.

19. (New) A method for producing a transgenic cotton plant comprising the steps of:

(a) obtaining tender petiole from cotton plants as explants,

(b) exposing the petiole explants to a culture of *Agrobacterium tumefaciens* that harbors a vector comprising an exogenous gene and a selectable marker, the *Agrobacterium* being capable of effecting the stable transfer of the exogenous

gene and selection agent resistance gene to the genome of the cells of the petiole explant,

(c) culturing the petiole explants to induce callus formation in medium containing about 0.05 mg/l 2, 4-dichlorophenoxyacetic acid and about 0.1 mg/l kinetin,

(d) selecting a transformed callus that expresses the exogenous gene,

(e) culturing the selected callus in suspension culture containing no added plant hormones to induce formation of embryoids, and

(f) regenerating an embryoid to obtain a transgenic cotton plant in a medium containing KNO_3 at a concentration of 3.8 mg/l.